

2012 - JCR Evaluation Form

SPECIES: Bighorn Sheep
 HERD: BS106 - TARGHEE
 HUNT AREAS: 6

PERIOD: 6/1/2012 - 5/31/2013

PREPARED BY: DOUG
 BRIMEYER

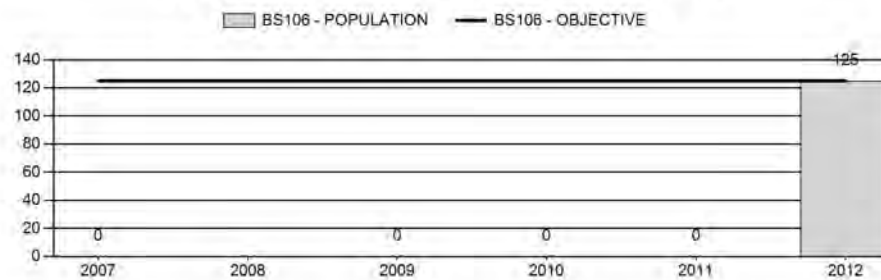
	<u>2007 - 2011 Average</u>	<u>2012</u>	<u>2013 Proposed</u>
Population:	0	125	N/A
Harvest:	1	0	1
Hunters:	3	2	2
Hunter Success:	33%	0%	50%
Active Licenses:	3	2	2
Active License Percent:	33%	0%	50%
Recreation Days:	19	19	20
Days Per Animal:	19	0	20
Males per 100 Females	47	0	
Juveniles per 100 Females	31	0	

Population Objective: 125
 Management Strategy: Special
 Percent population is above (+) or below (-) objective: 0%
 Number of years population has been + or - objective in recent trend: 0
 Model Date: None

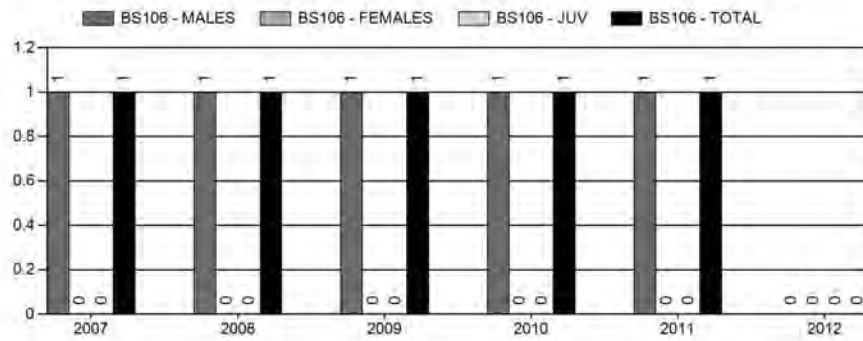
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	<u>JCR Year</u>	<u>Proposed</u>
Females \geq 1 year old:	na%	na%
Males \geq 1 year old:	na%	na%
Juveniles (< 1 year old):	na%	na%
Total:	na%	na%
Proposed change in post-season population:	na%	na%

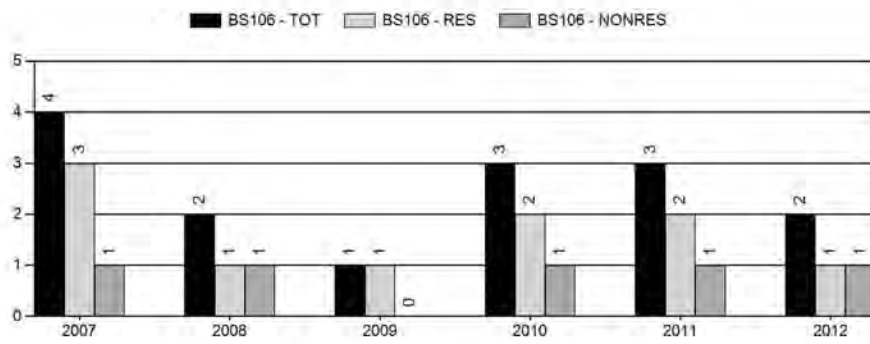
Population Size - Postseason



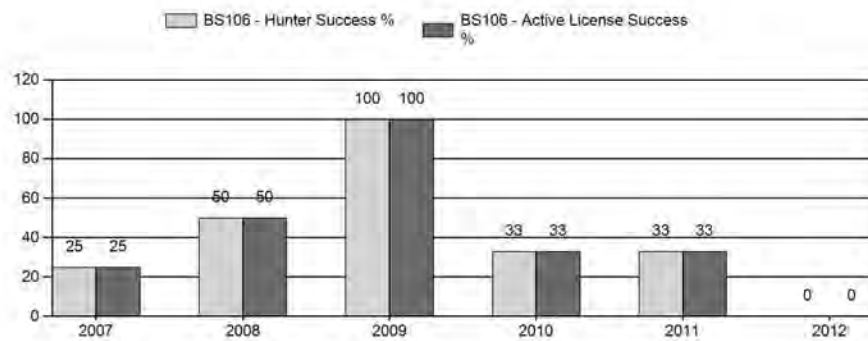
Harvest



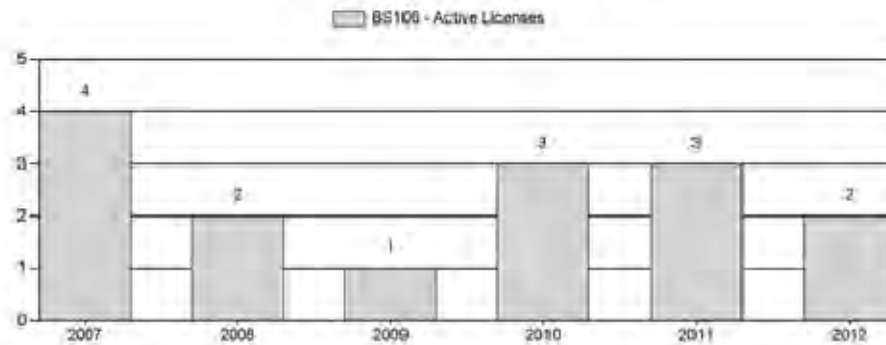
Number of Hunters



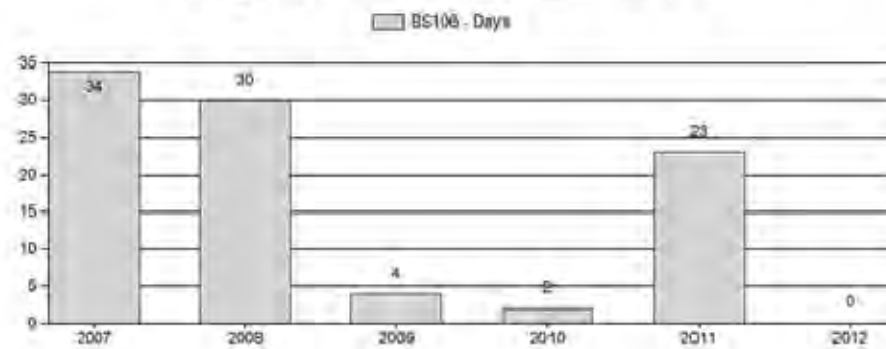
Harvest Success



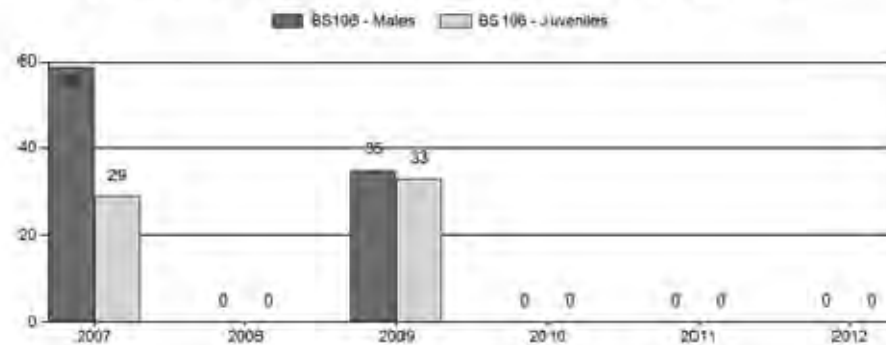
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2007 - 2012 Postseason Classification Summary

for Bighorn Sheep Herd BS106 - TARGHEE

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot Cts	Cls Obj	Males to 100 Females				Young to 100 Adult		
		Ylg	Adult	Total	%	Total	%	Total	%			Ylg	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2007	0	8	22	30	31%	51	53%	15	16%	96	0	16	43	59	±0	29	±0	19
2008	0	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	±0	0	±0	0
2009	0	1	16	17	21%	48	58%	16	20%	81	0	2	33	35	±0	33	±0	25
2010	0	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	±0	0	±0	0
2011	0	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	±0	0	±0	0
2012	125	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	±0	0	±0	0

2013 HUNTING SEASONS

SPECIES: BIGHORN SHEEP

HERD UNIT: TARGHEE (BS106)

Hunt Area	Type	Dates of Seasons Opens Closes		Limited Quota	Limitations
6		Aug. 15	Oct. 31	2	Limited quota; any ram (2 Residents)

Summary of Proposed License Changes

Area	Type	Change from 2012
6	1	+ 1 resident and – 1 non resident

Management Evaluation

Current Management Objective: 125

Management Strategy: Special

2012 Postseason Population Estimate: ~125

2013 Proposed Postseason Population Estimate: ~125

The management objective for the Targhee bighorn sheep herd unit is 125 sheep. Spreadsheet models developed for this herd do not appear to adequately simulate observed trends and therefore managers will develop a proposal using the mid-winter trend count as a benchmark for this population. The management strategy for this herd is designated as Special Management and will be revisited in 2014.

Herd Unit Issues

Present occupied habitat is located along the crest of the Teton Range, in Cascade, Colter, and Webb Canyons in Grand Teton National Park (GTNP) and Darby, Fox, Moose and Teton Creeks on the Caribou-Targhee National Forest (CTNF). Historically hunters have had a difficult time locating sheep on the CTNF. Domestic sheep allotments on National Forest likely influenced bighorn sheep distribution and in 1997 the revised Caribou-Targhee National Forest plan called

for the retirement of the domestic sheep allotments on the west side of the Tetons. Since 2004 when the fifth and final allotment was retired, bighorn sheep have started using habitats west of the Teton Crest in Teton, Darby, Fox and Moose Creeks.

Mountain goat sightings have been increasing north of Wyoming Highway 22 indicating that their distribution may be expanding north from the Snake Range into the Teton Range. In the future, field managers may need to consider potential impacts of an expanding mountain goat population on bighorn sheep.

Weather

Weather conditions during 2012 were extremely dry during the late summer and through the hunting season. Drought conditions persisted into early winter; snowpack in the Snake River and Teton Range were reported below normal. At the time of the mid-winter survey, winter precipitation was reported at 87% of normal. Please refer to the following web sites for specific weather station data. <http://www.ncdc.noaa.gov/temp-and-precip/time-series> and <http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/pdiimage.html>

Habitat

No habitat data has been collected on sheep summer and winter ranges. There are no established vegetation transects in this herd unit. Please refer to the 2012 Annual Report Strategic Habitat Plan Accomplishments, pages 61-77 for Jackson Region habitat improvement project summaries (<http://wgfd.wyo.gov/web2011/wildlife-1000708.aspx>).

Field Data

No field data were collected in the Targhee Herd Unit during the 2012 biological year.

Harvest Data

Data from the 2012 harvest survey indicate that 2 hunters did not harvest any rams. These hunters spent 19 days in the field. One sheep was harvested each year from 2007 to 2011.

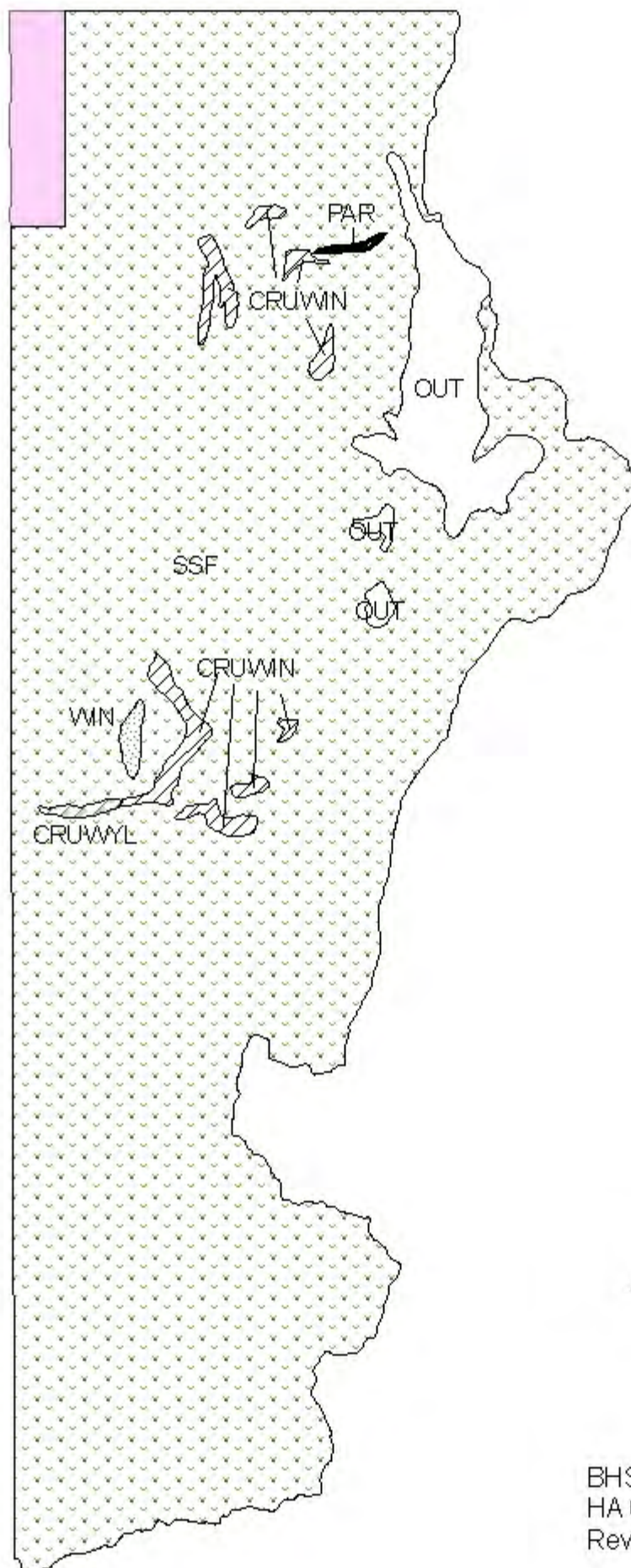
Population

This population is thought to be near the post season management objective and the proposed mid-winter trend based on aerial surveys in 2008 and 2010.

Management Summary

This population is distributed both within and along the GTNP Boundary in remote steep terrain making it difficult for hunters to locate and stalk sheep. As a result, harvest levels have remained low and on some years no sheep are harvested. Given the limited number of ram only licenses available and periodic harvest, hunting is not having an impact on this population. Two

licenses for any ram will be offered for future hunts until more sheep are observed occupying areas outside GTNP on CTNF lands.



BHS106 - Targhee
HA 6
Revised 9/02

2012 - JCR Evaluation Form

SPECIES: Bighorn Sheep

PERIOD: 6/1/2012 - 5/31/2013

HERD: BS107 - JACKSON

HUNT AREAS: 7

PREPARED BY: DOUG
BRIMEYER

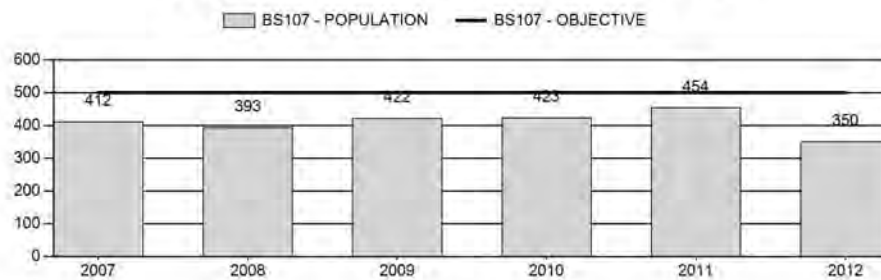
	<u>2007 - 2011 Average</u>	<u>2012</u>	<u>2013 Proposed</u>
Population:	421	350	N/A
Harvest:	7	11	7
Hunters:	9	13	8
Hunter Success:	78%	85%	88%
Active Licenses:	10	13	8
Active License Percent:	70%	85%	88%
Recreation Days:	101	94	100
Days Per Animal:	14.4	8.5	14.3
Males per 100 Females	56	62	
Juveniles per 100 Females	39	21	

Population Objective:	500
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	-30%
Number of years population has been + or - objective in recent trend:	0
Model Date:	None

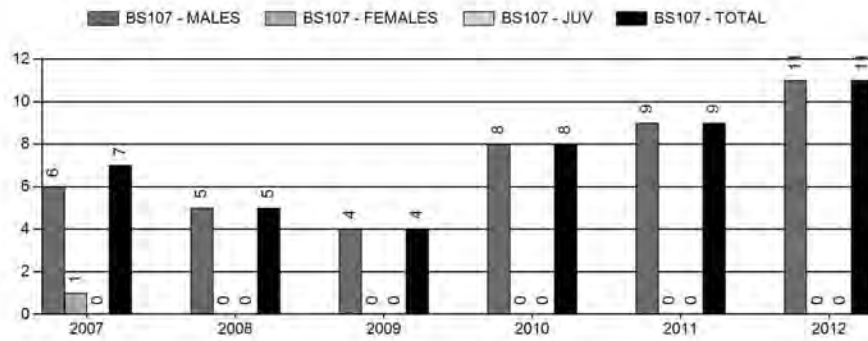
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	<u>JCR Year</u>	<u>Proposed</u>
Females \geq 1 year old:	na%	na%
Males \geq 1 year old:	na%	na%
Juveniles (< 1 year old):	na%	na%
Total:	na%	na%
Proposed change in post-season population:	na%	na%

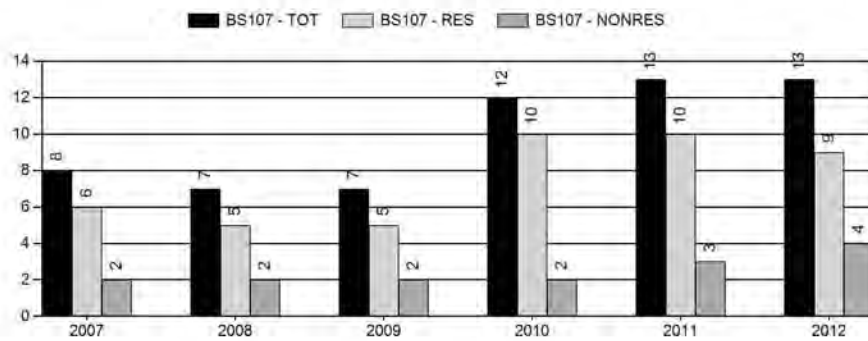
Population Size - Postseason



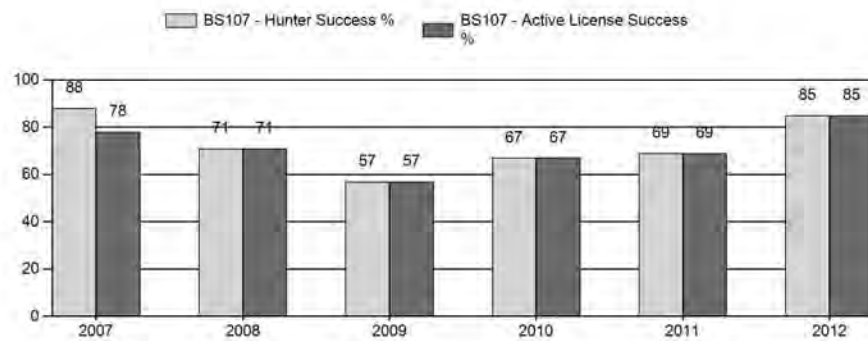
Harvest



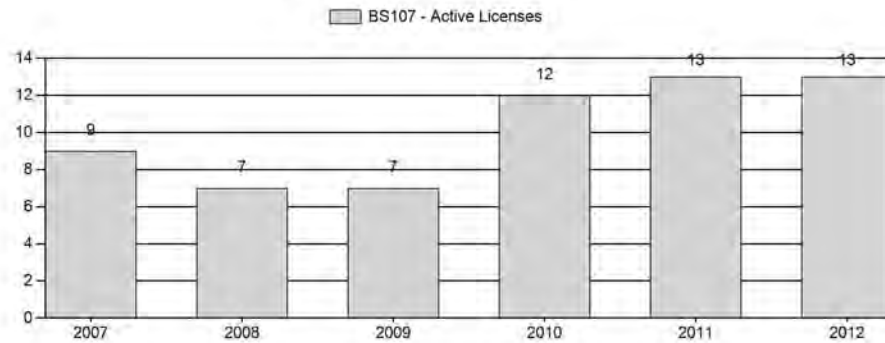
Number of Hunters



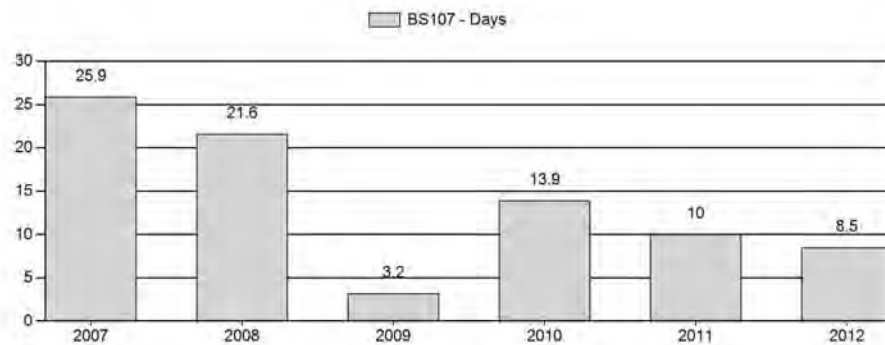
Harvest Success



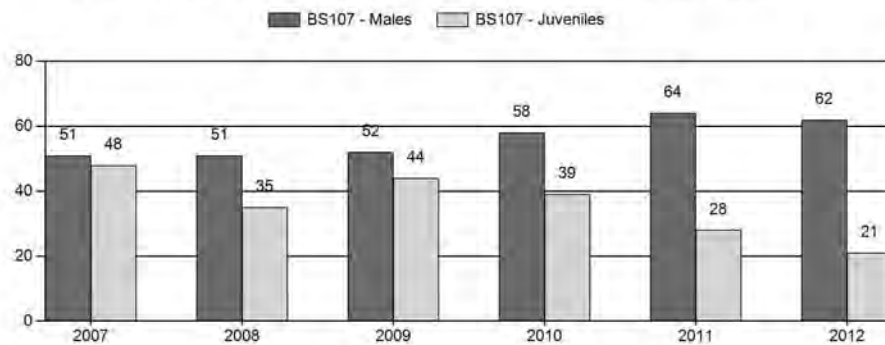
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2007 - 2012 Postseason Classification Summary

for Bighorn Sheep Herd BS107 - JACKSON

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot Cts	Cls Obj	Males to 100 Females				Young to		
		Yng	Adult	Total	%	Total	%	Total	%			Yng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2007	412	31	59	90	26%	177	50%	85	24%	352	287	18	33	51	± 0	48	± 0	32
2008	393	30	55	85	28%	166	54%	58	19%	309	277	18	33	51	± 0	35	± 0	23
2009	422	33	68	101	27%	194	51%	86	23%	381	312	17	35	52	± 0	44	± 0	29
2010	423	17	71	88	29%	152	51%	59	20%	299	298	11	47	58	± 6	39	± 4	25
2011	454	18	121	139	33%	217	52%	61	15%	417	349	8	56	64	± 3	28	± 1	17
2012	350	17	65	82	34%	133	55%	28	12%	243	256	13	49	62	± 6	21	± 3	13

2013 HUNTING SEASONS

SPECIES: BIGHORN SHEEP

HERD UNIT: TARGHEE (BS106)

Hunt Area	Type	Dates of Seasons		Limited Quota	Limitations
Opens	Closes				
7	1	Sep. 1	Oct. 31	8	Limited quota; any sheep

Special Archery Seasons

Hunt Area	Dates of Seasons	
	Opens	Closes
7	Aug. 15	Aug. 31

Summary of Proposed License Changes

Area	Type	Change from 2012
7	1	-4 licenses

Management Evaluation

Current Management Objective: 500

Management Strategy: Special

2012 Postseason Population Estimate: ~350

2013 Proposed Postseason Population Estimate: ~375

The management objective for the Jackson bighorn sheep herd unit is 500 sheep. Spreadsheet models developed for this herd do not appear to adequately simulate observed trends and therefore managers will develop a proposal using the mid-winter trend count as a benchmark for this population. The objective will be revised in 2015.

Herd Unit Issues

This population is well below the post season management objective and the proposed mid-winter trend. The bighorn population likely experienced a pneumonia related die-off in 2002 and again in 2012. During 2011 and 2012 eighteen bighorn sheep were radio collared to monitor disease, herd demographics and migrations (Appendix A)

Weather

Weather conditions during 2012 were extremely dry during the late summer and through the hunting season. Drought conditions persisted into early winter; snowpack in the Snake River and Jackson area were reported below normal. At the time of the mid-winter survey, winter precipitation was reported at 87% of normal. Please refer to the following web sites for specific weather station data. <http://www.ncdc.noaa.gov/temp-and-precip/time-series> and <http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/pdiimage.html>

Habitat

No habitat data has been collected on sheep summer and winter ranges. There are no established vegetation transects in this herd unit. Please refer to the 2012 Annual Report Strategic Habitat Plan Accomplishments, pages 61-77 for Jackson Region habitat improvement project summaries (<http://wgfd.wyo.gov/web2011/wildlife-1000708.aspx>).

Field Data

In the Gros Ventre drainage, approximately 40% of radio collared bighorn ewes died during 2012 and lamb ratios declined from a high of 50 lambs:100 ewes in late June to 15:100 by February, 2013. Carcasses retrieved during the summer indicate that the sheep likely died from pneumonia. Additional sampling in December and January (N=14) indicate that approximately 70% of the sheep were positive for *Mycoplasma ovipneumoniae*, and nine of the twelve (75%) had leukotoxin positive isolates.

In February 2013, classification surveys were flown over low elevation winter ranges in the Curtis Canyon, Flat Creek and Gros Ventre River winter ranges. High elevation ranges were not surveyed this year. The overall trend in sheep numbers declined from the previous survey of low elevation winter ranges. A total of 243 sheep were observed including 133 females, 28 lambs, 65 adult males and 17 yearling males. Herd unit ratios were 21 lambs:100 ewes, 49 adult rams:100 ewes and 13 yearling rams:100 ewes. Lamb ewe ratios were noticeably lower in the Gros Ventre drainage where there were visibly fewer sheep on Russold Hill, Red Hills and Grey Hills.

Harvest Data

Data from the 2012 harvest survey indicate that 13 hunters harvested 11 rams. Since the 2005 the numbers of licenses issued in Area 7 have increased. The average age of harvested rams was

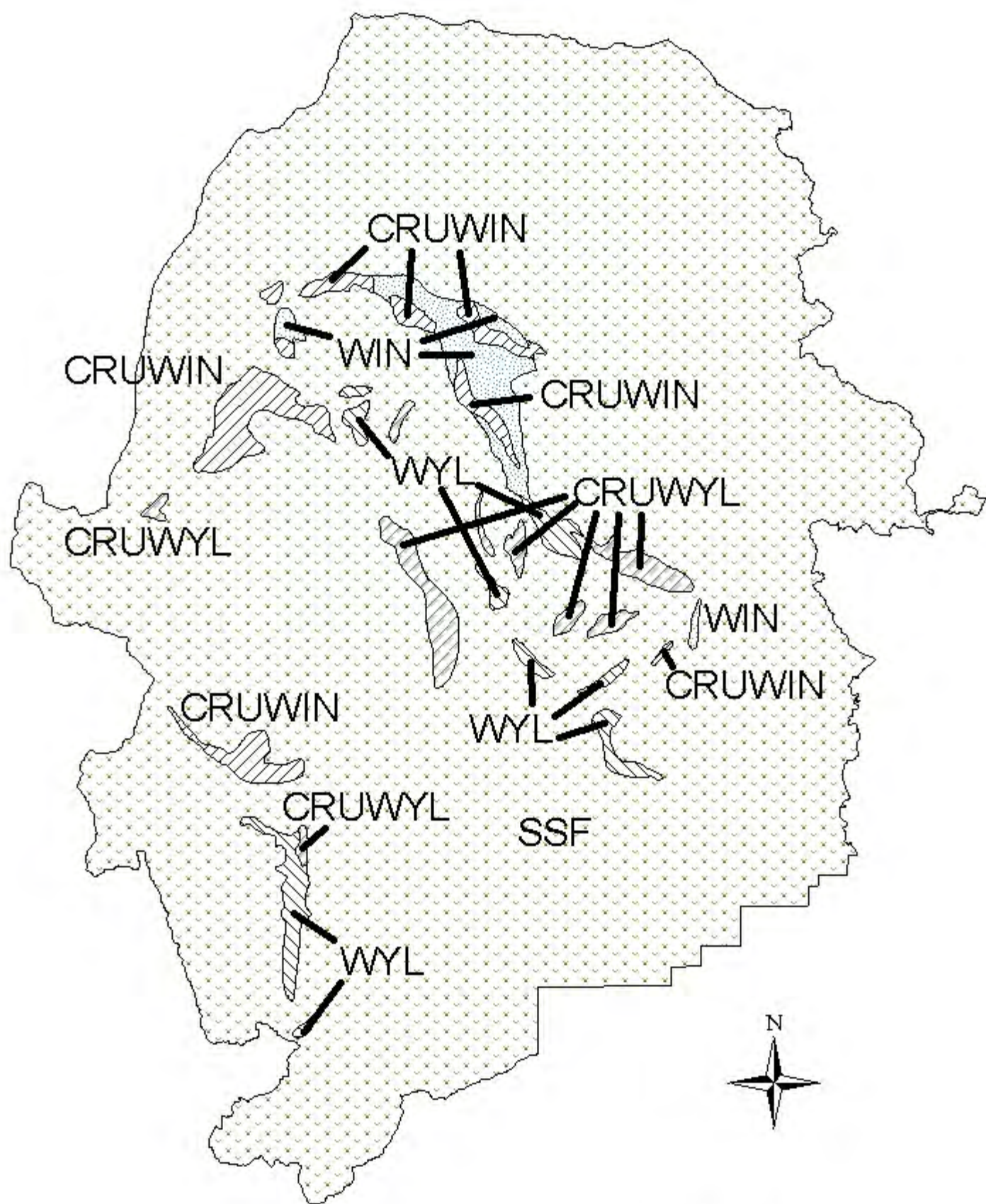
6.5 years old and was the same as 2011. Based on classification surveys and the number of rams observed (N=82), it is likely that this harvest had minimal effect on the overall population. However given the recent population trend, managers are concerned that the recent pneumonia die-off will influence overall lamb and ram numbers in this population.

Population

This population is thought to be below the post season management objective based on aerial surveys in 2012. Spreadsheet models developed for this herd do not appear to adequately simulate observed trends and therefore managers will develop a proposal using the mid-winter trend count as a benchmark for this population. The observed population trend indicates that this population was approaching winter range densities similar to those observed in 2001.

Management Summary

A reduction of 4 sheep licenses is proposed due to the lower number of sheep observed on low elevation winter ranges and the lower lamb:ewe ratio. Following the 2002 die-off this population had a three year period of low lamb production. If lower lamb:ewe ratios are experienced again in this herd, this population will likely be suppressed for several more years. Due to the observed changes on winter ranges and the anticipation of lower lamb recruitment more conservative seasons are warranted.



BHS107 - Jackson
HA 7
Revised 9/02

